

Title (en)
SEMICONDUCTOR LIGHT ENGINE FOR AUTOMOTIVE LIGHTING

Title (de)
HALBLEITERLICHTMASCHINE FÜR KRAFTFAHRZEUGBELEUCHTUNG

Title (fr)
MOTEUR DE LUMIERE SEMI-CONDUCTEUR POUR ECLAIRAGE AUTOMOBILE

Publication
EP 1963739 A1 20080903 (EN)

Application
EP 06804716 A 20061114

Priority

- CA 2006001845 W 20061114
- US 29085305 A 20051130

Abstract (en)
[origin: US2007121333A1] A light engine to provide light from a plurality of semiconductor light sources in an automotive lighting system, such as a headlamp, includes at least two substrates each of which has semiconductor light sources mounted thereon. The semiconductor light sources are spaced from one another on the substrates for cooling purposes. The substrates also preferably include at least one layer of heat transfer material which assists in transferring waste heat from the semiconductor light sources to a heat sink or other cooling means. The light engine further includes at least one transfer device comprising a bundle of light pipes, one light pipe for each semiconductor light source, and each light pipe has a receiving end which is located adjacent a respect one semiconductor light source and an emitter end which is located in close proximity to the emitter end of each other light pipe emitter end. The substrates can be located in a location which is convenient for the purposes of cooling the semiconductor light sources while the emitter end of the light pipes of the transfer device can be located adjacent a lens of the headlamp or other automotive lighting system. Further, the substrates can be stacked, one behind the other, with the light pipes passing through one substrate to receive light from semiconductor light sources on the other substrate.

IPC 8 full level
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CPC (source: EP US)
B60Q 1/0011 (2013.01 - EP US); **F21K 9/00** (2013.01 - EP US); **G02B 6/0008** (2013.01 - EP US); **F21S 41/24** (2017.12 - EP US); **F21Y 2115/10** (2016.07 - EP US)

Citation (search report)
See references of WO 2007062500A1

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DE FR GB

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